

IN THE CLAIMS

Kindly cancel Groups II, III, IV, V, VI and VII, claims 10-18, 21-34 without prejudice.

1. (Original) A device for determining mechanical, particularly elastic, parameters of an examination object, comprising a) at least one arrangement for determining the spatial distribution of magnetic particles in at least one examination area of the examination object, comprising a means for generating a magnetic field with a spatial profile of the magnetic field strength such that there is produced in at least one examination area a first part-area having a low magnetic field strength and a second part-area having a higher magnetic field strength, a means for detecting signals which depend on the magnetization in the examination object, particularly in the examination area, that is influenced by a spatial change in the particles, and a means for evaluating the signals so as to obtain information about the, in particular temporally changing, spatial distribution of the magnetic particles in the examination area; and b) at least one means for generating mechanical displacements, in particular oscillations, at least in and/or adjacent to the examination area of the examination object.
2. (Original) A device as claimed in claim 1, characterized by at least one means, in particular at least one coil arrangement, for changing the spatial position of the two part-areas in the examination area so that the magnetization of the particles changes locally.
3. (Previously Presented) A device as claimed in claim 1, characterized in that the means for generating mechanical displacements or oscillations comprises at least one oscillating element, an oscillation generator and an oscillation transmission means for transmitting oscillations from the oscillation generator to the oscillating element and/or at least one sound source, in particular an ultrasound source.
4. (Original) A device as claimed in claim 3, characterized in that the oscillation generator is arranged outside and at a distance from the magnet arrangement and the oscillating element and the oscillation transmission means are made of non-metallic and/or metallic material.

5. (Previously Presented) A device as claimed in claim 1, characterized in that the means for generating the magnetic field comprise a gradient coil arrangement for generating a magnetic gradient field which in the first part-area of the examination area reverses its direction and has a zero crossing.
6. (Previously Presented) A device as claimed in claim 1, characterized by a means for generating a temporally changing magnetic field that is superposed on the magnetic gradient field, for the purpose of moving the two part-areas in the examination area.
7. (Previously Presented) A device as claimed in claim 1, characterized by a coil arrangement for receiving signals induced by the temporal change in the magnetization in the examination area.
8. (Previously Presented) A device as claimed in claim 1, characterized by means for generating a first and at least a second magnetic field that are superposed on the magnetic gradient field, where the first magnetic field changes slowly in time terms and with a high amplitude and the second magnetic field changes rapidly in time terms and with a low amplitude.
9. (Original) A device as claimed in claim 8, characterized in that the two magnetic fields run essentially perpendicular to one another in the examination area.
- 10-18 (Canceled).
19. (Previously Presented) The use of the device as claimed in claim 1 for determining the internal pressure or the change in internal pressure of gas bubbles present in an examination object, in order to image body parts and/or organs.

20. (Previously Presented) The use of the device as claimed in claim 1 for examining, particularly in real time, rubber components, tires or components based on thermoplastic elastomers, or tissue or organs, in particular respiratory organs.

21-34 (Canceled).